



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/559,686

12/06/2005

Luciano Salda

P08798US00/MP

2998

881 7590 01/21/2009

STITES & HARBISON PLLC
1199 NORTH FAIRFAX STREET
SUITE 900
ALEXANDRIA, VA 22314

EXAMINER

MCKANE, ELIZABETH L

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

01/21/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/559,686	Applicant(s) SALDA, LUCIANO	
	Examiner ELIZABETH L. MCKANE	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 8-17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12062005</u> . | 6) <input type="checkbox"/> Other: ____. |

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Furthermore, in claim 12 specifically, "the station" in line 1 is confusing, as many 'stations' have been previously recited and it cannot be determined which 'station' is being referred to.

In claim 14, "the corresponding lateral guides" lack positive antecedent basis as no such elements have been previously recited.

Claim 18 seems to lack a transitional phrase.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1797

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-7, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kongmark (US 2002/0068011) in view of Held et al. (US 5,106,594) and Datar et al. (US 5,340,536).

With respect to claims 1, 2, 18, and 19, Kongmark teaches an apparatus for treating waste with microwaves. The apparatus of Kongmark includes a plurality of containers **G**, a carousel **5** having a vertical axis, a first station **2** for shredding the waste, a station for moistening the waste (paragraphs [0036], [0047], [0049]), and a station for hermetically sealing the waste ([0038]). A waveguide **6** is disclosed to be connected to the hermetically sealed container ([0026], [0027], [0046]). At the end of the cycle, the containers **G** are

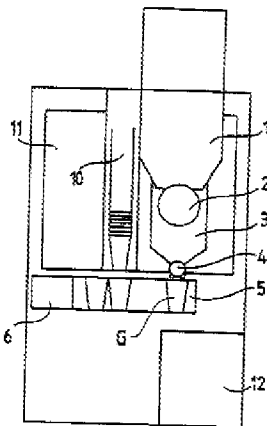


Fig. 1

discharged. See paragraphs Example 1. In use, the apparatus of Kongmark irradiates the waste with microwaves at a frequency of 20455 GHz ([0016]) and achieves a temperature of 160 °C (i.e. 'approximately 150 °C') and a pressure of 4-10 bars ([0024]). As to treatment

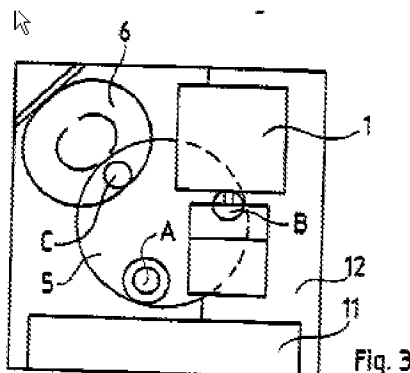


Fig. 3

Art Unit: 1797

time, it is well-within the purview of one in the art to optimize treatment time in order to likewise optimize waste treatment. Such is readily determinable through routine experimentation. Kongmark is silent with respect to a box for storing the waste prior to shredding, to a means for monitoring and controlling the pressure within the containers **G**, and to a means for depressurization.

Held et al. teaches the known use of boxes **10** to carry waste to a shredding station in a waste disinfection apparatus. As boxes are an efficient means of containing wastes for shipment from medical environment to a treatment facility, it would have been obvious to one of ordinary skill in the art to employ boxes to contain the waste of Kongmark prior to shredding.

Datar et al. discloses an apparatus for disinfection of shredded hazardous waste utilizing a means for monitoring the pressure of waste being sterilized by RF radiation. See col.17, lines 38-50. Furthermore, the final stage of treatment involves a means for evacuating (i.e. depressurizing) the moist air and moisture trapped in the neutralized waste. See col.17, lines 51-68. It would have been obvious to use the means for monitoring pressure of Datar et al. in the apparatus of Kongmark, as Datar et al. discloses that this means (control system) validates the neutralization process. Furthermore, one would have found it obvious to employ the means for depressurizing of Datar et al. in Kongmark in order to rapidly dry the moist waste, as disclosed by Datar et al..

As to claims 3-5, use of the terminology “can be provided” in these claims implies that the elements following the phrase are optional. Thus, these elements are not required to meet the claim limitations.

With respect to claim 6, Kongmark is silent with respect to a temperature probe in each container **G**. However, Datar et al. teaches the use of a “plurality of temperature sensors **221** inserted into neutralization chamber **49** through side wall **228**” (col.10, lines 10-11). As Datar et al. discloses that such sensors permit monitoring of waste temperature during the radiation and thus, can validate sterilization, they would have been an obvious addition to the containers of Kongmark.

As to claim 7, Kongmark discloses a container having a round cross section. Although Kongmark does not teach the use of steel to construct the container, it would have been obvious to one of ordinary skill in the art to do so, as steel is a well-known material capable of withstanding the pressures and temperatures experienced in the apparatus of Kongmark. There would have been no unexpected results in the choice of steel over any other materials.

Allowable Subject Matter

6. Claims 8-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: With respect to claims 8 and 17, Kongmark fails to teach or suggest a

Art Unit: 1797

container having the axial shank and connection means with the carousel as recited in claim 8. With respect to claims 9, 10, and 16, none of Kongmark, Held et al. or Datar et al. teach or suggest the specific elements of the first station, specifically the vertical sleeve and piston, as recited in claim 9. With respect to claim 11, none of Kongmark, Held et al. or Datar et al. teach or suggest the specific elements of the sterilizing station, specifically the means for raising the container and sealing piston. With respect to claims 14 and 15, none of Kongmark, Held et al. or Datar et al. teach or suggest the specific elements of the discharging station, specifically the means for raising the container and lateral guides recited in claim 14.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH L. MCKANE whose telephone number is (571)272-1275. The examiner can normally be reached on Mon-Fri; 5:30 a.m. - 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1797

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elizabeth L McKane/
Primary Examiner, Art Unit 1797

elm
20 January 2009